

# Section 1

## Introduction

Within the San Bernardino County area of the Santa Ana River Basin, management and control of the municipal separate storm sewer system (MS4) is shared by a number of agencies, including the San Bernardino County Flood Control District (“District”); San Bernardino County (“County”); and the cities of Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa (“16 cities”).

To control stormwater pollutants carried by urban runoff in San Bernardino County, the Santa Ana Regional Water Quality Control Board (RWQCB) issued area-wide waste discharge requirements for the County’s MS4 on April 26, 2002 (NPDES No. CAS618036; Order No. R8-2002-0012) (“MS4 Permit”). This MS4 Permit to discharge expires on April 27, 2007. As required by the MS4 Permit, an application for reissuance of waste discharge requirements, a Report of Waste Discharge (ROWD) must be submitted to the RWQCB by October 27, 2006.

This Report of Waste Discharge (ROWD) is the application for the fourth-term MS4 Permit for the County within the Santa Ana River Watershed. For the fourth-term MS4 Permit, the permittees recommend that the stormwater management program shift from process-based outcomes, mostly measured through completion of programmatic or administrative tasks designed to establish a sound program, to a more compliance-based approach, where outcomes are measured primarily by compliance with water quality objectives and Total Maximum Daily Load (TMDL) implementation requirements. This recommendation is driven by the Middle Santa Ana River (MSAR) Bacterial Indicator TMDL (soon to be approved by the U.S. Environmental Protection Agency (EPA)) and Big Bear Lake area TMDLs under development or planned during the next MS4 Permit term (Big Bear Lake Nutrient TMDL, Big Bear Lake and Rathbun Creek Sediment TMDL, and Big Bear Lake Watershed Metals TMDL).

With the establishment of these TMDLs, the stormwater management program must shift its focus and priorities to implement the requirements associated with each TMDL. Accordingly, preparation of this ROWD has focused on how the area-wide stormwater program can redirect resources to where they can achieve the best water quality benefits throughout the MS4 Permit area. The following sections provide an overview of the principles guiding the development of this ROWD, the recommendations put forth, and the process followed to develop these recommendations.

## 1.1 Principles Behind Approach: Risk-Based, Outcome-Oriented, Compliance-Focused

During the first three permit cycles (15 years), the MS4 permittees focused on characterizing stormwater quality and establishing a fundamentally sound program in each of the key areas identified in EPA regulations [40 CFR §122.34(b)]:

- Public education and outreach on stormwater impacts;
- Public involvement/participation;
- Illicit discharge detection and elimination;
- Construction site stormwater runoff control;
- Post-construction stormwater management in new development and redevelopment; and
- Pollution prevention/good housekeeping for municipal operations.

Recent audits indicate that the permittees have largely accomplished that goal. Therefore, during the fourth permit cycle (2007-2012), the permittees propose to establish new program priorities. The emphasis will shift from characterizing water quality and building a sound general program toward improving water quality with more targeted implementation efforts. The permittees intend to develop and implement a Risk-based, Outcome-oriented, Compliance-focused program.

### *Risk-based*

During the next permit cycle, permittees are using sampling data collected over the last 15 years to identify and prioritize the most significant water quality problems in the receiving waters. This *Risk-based approach* will also rely on the RWQCB's 305(b) stream assessments and California's 303(d) listings to establish appropriate program priorities.

Program resources will be reallocated and reapportioned to target Pollutants-of-Concern that pose the greatest threat to human health or the aquatic ecosystem. The frequency and intensity of inspections will be realigned to match the severity of risk associated with specific discharges. Similarly, the scope of public education programs will be adjusted to focus predominantly on the most urgent and significant water quality issues. The first task will be to develop a scoring system which will be used to evaluate and prioritize the relevant risks.

### *Outcome-oriented*

To date, available evidence strongly indicates that the highest priority for the Stormwater Management Program should be to reduce bacterial contamination in the Santa Ana River. Restructuring the program to be *Outcome-oriented* means that financial and human resources will be reallocated to achieve real-world improvements in water quality.

The new outcome-oriented program will place much greater emphasis on demonstrating the effectiveness of various implementation activities. Direct measures (for example, changes in water quality, tons of hazardous waste collected, etc.) will be preferred over indirect measures (for example, advertising impressions, events attended, etc.). Program resources will be retargeted to concentrate on controlling sources with the greatest potential for reducing the mass or concentration of pollutants-of-concern.

### ***Compliance-focused***

In particular, where the RWQCB has adopted TMDLs for specific pollutants, the permittees will shift available resources to be *Compliance-focused*, that is, to achieve compliance with water quality objectives. Generic program elements will be re-targeted toward executing the requirements identified in TMDL Implementation Plans.

The primary goal of a compliance-focused program is to ensure stormwater discharges consistently meet the water quality objectives identified in the Basin Plan. Particular emphasis will be placed on addressing the current 303(d) listings while working to prevent any additional listings from occurring as a result of urban runoff. Comprehensive water quality monitoring will be used to evaluate the success of this new initiative.

Results from the water quality monitoring program and on-going inspections program will provide a feedback loop to periodically update the risk-based management system. New data indicating elevated concentrations in any pollutants of concerns will be used to update program priorities. Similarly, inspection results will be used to identify and target high risk dischargers for more frequent and more intense compliance audits.

The permittees strongly believe that moving to a Risk-based, Outcome-oriented, Compliance-focused program is the best way to ensure that scarce public resources are used to provide the greatest possible benefit to public health and the environment.

## **1.2 ROWD Development Process**

Using the principles defined above, the permittees developed the ROWD over a period of 8 months. The following sections describe the process and the participants involved in the preparation of the 2006 ROWD.

### **1.2.1 Permittee Meetings**

Development of the ROWD began with a February 15<sup>th</sup>, 2006 kickoff meeting. During this kickoff session, the permittees reviewed the existing MS4 Permit and identified program areas that could be improved and new issues that needed to be addressed, for example implementation of the MSAR Bacterial Indicator TMDL. It was agreed from the outset that the overall stormwater program needed to be re-evaluated and, if needed, modified so that changing water quality priorities could be more effectively addressed with available resources.

Following this kickoff session, the permittees met monthly to work collectively on how the stormwater program could be modified to address the changing water quality priorities. Meetings were publicly noticed on the County's stormwater website: <http://www.co.san-bernardino.ca.us/flood/npdes/permittees.htm> and open to the public. A record of meeting attendance is available from the San Bernardino County Flood Control District.

From August to October two drafts of the ROWD were developed, reviewed and modified as necessary to ensure that the content of the ROWD and supporting documents was consistent with the guiding principles described above. The final ROWD was submitted to the RWQCB as required by October 27, 2006.

### **1.2.2 Regional Water Quality Control Board Participation**

Following the kickoff of the ROWD development process, a meeting was held at the RWQCB on February 16<sup>th</sup>, 2006 to discuss MS4 Permit-related stormwater issues that had been identified by the permittees as important issues to address during the ROWD development process. In addition, the meeting provided an opportunity for RWQCB staff to identify the key issues that they were interested in seeing addressed during the next permit term.

RWQCB staff was invited to participate in the monthly ROWD development meetings to participate in the process. RWQCB staff attended all meetings and actively participated in the meeting discussions.

A second meeting was held with RWQCB staff on September 19, 2006 to discuss the first draft of the ROWD and supporting documents. The purpose of this meeting was to provide an additional opportunity for RWQCB staff to identify any concerns or issues regarding recommendations for program modifications that were actively being considered.

### **1.2.3 Regional Water Quality Control Board Audits**

Three Co-Permittee audits were conducted in 2005 by RWQCB staff with assistance from the EPA contractor, Tetra Tech. Subsequently, the remaining Co-Permittees were audited by RWQCB staff between May and August, 2006, during development of this ROWD. On August 23, 2006, RWQCB staff presented a summary of their key findings from these audits and recommendations for program improvement during the next permit term. These recommendations were subsequently considered and addressed during development of the final ROWD.

### **1.2.4 Coordination with Regional MS4 Permittees**

When appropriate, discussions were held with neighboring Riverside County to gauge their interest in the cooperative implementation of specific stormwater program elements. Where appropriate, the results of these discussions were included as recommendations for implementation during the next permit term.

### 1.3 ROWD Organization

The 2000 ROWD submitted to the RWQCB, which resulted in the issuance of 2002 MS4 Permit, combined the ROWD and Municipal Stormwater Management Plan (MSWMP) into a single document. The MSWMP and associated documents incorporated by reference identify the specific stormwater program activities that will be carried out by the permittees during the permit term.

This ROWD submittal represents a substantial reorganization of the documents applicable to the County MS4 stormwater program. The ROWD is the application for reissuance of the MS4 Permit. Separate, but attached, is the MSWMP and documents that are part of the MSWMP, for example the Water Quality Management Plan (WQMP). The MSWMP and associated documents describe the stormwater management program that is to be implemented by the permittees under the MS4 Permit. It has been updated based on the recommendations contained in the ROWD. Following is a summary of the content to be found in the remaining sections of the ROWD and its appendices:

- **Section 2 - Stormwater Program Characterization** – Summary of existing stormwater program, including applicant information, program history; program management structure; MS4 description; and program accomplishments since the issuance of the 2002 MS4 Permit;
- **Section 3 - Discharge Characterization** – Approach used to evaluate water quality; summary of water quality in the area covered by the MS4 Permit; and identification of pollutants of concern, which should be addressed during the next permit term;
- **Section 4 - Permit Recommendations** – Provides a summary of permittee findings and recommendations for changes in the MS4 Permit that are consistent with the principles described in Section 1.1; and
- **Section 5 - Recommended Implementation Activities** – Based on the recommendations provided in Section 4, this section describes specific activities recommended for implementation during the next permit term.
- **Appendices** – The appendices to the ROWD contain the following supporting information:
  - Appendix A      MSWMP, October 2006
  - Appendix B      Draft Implementation Agreement, October 2006
  - Appendix C      Recommended modifications to existing permit language
  - Appendix D      MS4 Facility Map